

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Gruis et al. Confirmation No.: Not Assigned
Appl. No.: Not Assigned
Filed: Concurrently Herewith
For: METHODS OF INCREASING POLYPEPTIDE ACCUMULATION
IN PLANTS

**STATEMENT IN SUPPORT OF FILING A
SEQUENCE LISTING UNDER 37 CFR § 1.821(f)**

Box Patent Application
Commissioner for Patents
Washington, DC 20231

Sir:

I hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted concurrently herewith in accordance with 37 CFR § 1.821(c) and (e), are the same.

Respectfully submitted,

Kathryn L. Coulter

Kathryn L. Coulter
Agent for Applicant
Registration No. 45,889

Customer No. 00826
Alston & Bird LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Raleigh Office (919) 862-2200
Fax Raleigh Office (919) 862-2260

"Express Mail" Mailing Label Number EL868637279US
Date of Deposit: August 21, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Box Patent Application, Commissioner for Patents, Washington, DC 20231.

Nora C. Martinez
Nora C. Martinez

SEQUENCE LISTING

<110> Gruis, Darren B.
Jung, Rudolf

<120> Methods of Increasing Polypeptide
Accumulation in Plants

<130> 35718/237251

<150> US 60/226,804

<151> 2000-08-21

<160> 3

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1560

<212> DNA

<213> Arabidopsis thaliana

<400> 1

ctcacaagaa	tcagattcaa	gatagaagtt	tttcaaacaa	tgtctagtcc	tcttggtcac	60
tttcagattc	ttgtttttct	tcatgctttg	cttatcttct	cagctgagtc	ccgcaaaacc	120
caattgctga	acgataatga	tgttgaatct	agcgacaaga	gtgcaaaagg	cacacgatgg	180
gctgttttag	ttgctggatc	aaatgaatat	tataactaca	ggcatcaggc	tgacatatgc	240
caocgcgtatc	agatactccg	aaaaggcggt	ttaaaagatg	aaaacatcat	tgtgtttatg	300
tatgatgata	tcgcgttttc	ctcggagaat	cctaggcctg	gagttatcat	taataaacca	360
gatggagaag	atgtttataa	aggagttcct	aaggactaca	ctaaagaagc	tgttaatggt	420
caaaaacttct	acaatgtggt	acttggaat	gaaagtggcg	tcacaggagg	aaatggcaaa	480
gttgtgaaaa	gtggctctaa	tgataatatc	ttcatctatt	atgctgacca	tggagctcct	540
ggcttaatag	cgatgccac	tggtgatgaa	gttatggcaa	aagatttcaa	tgaagtottg	600
gagaagatgc	ataagagaaa	aaaatacaac	aagatggtga	tctatgttga	agcatgtgaa	660
tcaggaagta	tgtttgaagg	gattttaaag	aaaaatctca	acatatacgc	agtgactgct	720
gctaattcta	aagagagcag	ctggggagtt	tactgtcctg	agtcatatcc	tcctcctcct	780
tctgagattg	gaacttgtct	cggcgataca	tttagcatct	cttggccttg	ggacagtgac	840
cttcatgaca	tgagcaaaga	gactttggag	caacaatacc	acgttgtaaa	gagaagagta	900
ggatctgatg	taccagagac	ttctcatgta	tgccgtttcg	gaacagagaa	gatgcttaaa	960
gattatcttt	cctcttacat	tggagaagaa	cctgaaaacg	ataacttcac	tttcacggaa	1020
tccttttcct	caccaatctc	taattctggc	ttggtcaatc	cgcgcgatat	tcctctgcta	1080
tacctccaga	gaaagattca	aaaagctcca	atgggatcac	ttgaaagcaa	agaagctcag	1140
aagaaattgc	ttgacgaaaa	gaatcatagg	aaacaaatcg	atcagagcat	tacagacatt	1200
ctgcggcttt	cagttaaaca	aaccaatgtc	ttaaactctc	taacttccac	aagaacaaca	1260
ggacagocctc	ttgtagacga	ttgggattgc	ttcaagactc	tagttaatag	cttcaagaat	1320
cactgcggtg	caacggtgca	ttacggattg	aagtatacag	gagcgcttgc	caatatctgc	1380
aatatgggag	tggatgtgaa	gcaaactggt	tcagccattg	aacaagcttg	ttcgatgtaa	1440
tgatttgcaa	aacaatgtga	tattcgactt	taaaaatata	aaagttaatt	tcaataaaaac	1500
tcgatgtaga	gatggttggt	tcatgatact	acttttacat	gaaaaaaaaa	aaaaaaaaaa	1560

<210> 2

<211> 466

<212> PRT

<213> Arabidopsis thaliana

<400> 2

Met	Ser	Ser	Pro	Leu	Gly	His	Phe	Gln	Ile	Leu	Val	Phe	Leu	His	Ala	
1				5					10					15		
Leu	Leu	Ile	Phe	Ser	Ala	Glu	Ser	Arg	Lys	Thr	Gln	Leu	Leu	Asn	Asp	
			20					25					30			
Asn	Asp	Val	Glu	Ser	Ser	Asp	Lys	Ser	Ala	Lys	Gly	Thr	Arg	Trp	Ala	
		35					40					45				
Val	Leu	Val	Ala	Gly	Ser	Asn	Glu	Tyr	Tyr	Asn	Tyr	Arg	His	Gln	Ala	
	50					55					60					
Asp	Ile	Cys	His	Ala	Tyr	Gln	Ile	Leu	Arg	Lys	Gly	Gly	Leu	Lys	Asp	
65					70					75					80	
Glu	Asn	Ile	Ile	Val	Phe	Met	Tyr	Asp	Asp	Ile	Ala	Phe	Ser	Ser	Glu	
				85					90					95		
Asn	Pro	Arg	Pro	Gly	Val	Ile	Ile	Asn	Lys	Pro	Asp	Gly	Glu	Asp	Val	
			100					105						110		
Tyr	Lys	Gly	Val	Pro	Lys	Asp	Tyr	Thr	Lys	Glu	Ala	Val	Asn	Val	Gln	
		115					120					125				
Asn	Phe	Tyr	Asn	Val	Leu	Leu	Gly	Asn	Glu	Ser	Gly	Val	Thr	Gly	Gly	
	130					135					140					
Asn	Gly	Lys	Val	Val	Lys	Ser	Gly	Pro	Asn	Asp	Asn	Ile	Phe	Ile	Tyr	
145					150					155					160	
Tyr	Ala	Asp	His	Gly	Ala	Pro	Gly	Leu	Ile	Ala	Met	Pro	Thr	Gly	Asp	
				165					170					175		
Glu	Val	Met	Ala	Lys	Asp	Phe	Asn	Glu	Val	Leu	Glu	Lys	Met	His	Lys	
			180					185					190			
Arg	Lys	Lys	Tyr	Asn	Lys	Met	Val	Ile	Tyr	Val	Glu	Ala	Cys	Glu	Ser	
		195					200					205				
Gly	Ser	Met	Phe	Glu	Gly	Ile	Leu	Lys	Lys	Asn	Leu	Asn	Ile	Tyr	Ala	
	210					215					220					
Val	Thr	Ala	Ala	Asn	Ser	Lys	Glu	Ser	Ser	Trp	Gly	Val	Tyr	Cys	Pro	
225					230					235					240	
Glu	Ser	Tyr	Pro	Pro	Pro	Pro	Ser	Glu	Ile	Gly	Thr	Cys	Leu	Gly	Asp	
				245					250					255		
Thr	Phe	Ser	Ile	Ser	Trp	Leu	Glu	Asp	Ser	Asp	Leu	His	Asp	Met	Ser	
			260					265					270			
Lys	Glu	Thr	Leu	Glu	Gln	Gln	Tyr	His	Val	Val	Lys	Arg	Arg	Val	Gly	
		275					280					285				
Ser	Asp	Val	Pro	Glu	Thr	Ser	His	Val	Cys	Arg	Phe	Gly	Thr	Glu	Lys	
	290					295					300					
Met	Leu	Lys	Asp	Tyr	Leu	Ser	Ser	Tyr	Ile	Gly	Arg	Asn	Pro	Glu	Asn	
305					310					315					320	
Asp	Asn	Phe	Thr	Phe	Thr	Glu	Ser	Phe	Ser	Ser	Pro	Ile	Ser	Asn	Ser	
				325					330					335		
Gly	Leu	Val	Asn	Pro	Arg	Asp	Ile	Pro	Leu	Leu	Tyr	Leu	Gln	Arg	Lys	
			340					345					350			
Ile	Gln	Lys	Ala	Pro	Met	Gly	Ser	Leu	Glu	Ser	Lys	Glu	Ala	Gln	Lys	
		355					360					365				
Lys	Leu	Leu	Asp	Glu	Lys	Asn	His	Arg	Lys	Gln	Ile	Asp	Gln	Ser	Ile	
		370				375					380					
Thr	Asp	Ile	Leu	Arg	Leu	Ser	Val	Lys	Gln	Thr	Asn	Val	Leu	Asn	Leu	
385					390					395					400	
Leu	Thr	Ser	Thr	Arg	Thr	Thr	Gly	Gln	Pro	Leu	Val	Asp	Asp	Trp	Asp	
				405					410					415		
Cys	Phe	Lys	Thr	Leu	Val	Asn	Ser	Phe	Lys	Asn	His	Cys	Gly	Ala	Thr	
			420					425					430			
Val	His	Tyr	Gly	Leu	Lys	Tyr	Thr	Gly	Ala	Leu	Ala	Asn	Ile	Cys	Asn	
			435				440					445				

Met Gly Val Asp Val Lys Gln Thr Val Ser Ala Ile Glu Gln Ala Cys
 450 455 460
 Ser Met
 465

<210> 3
 <211> 4320
 <212> DNA
 <213> Arabidopsis thaliana

<400> 3
 cagtgccacg tgtcatcaac cgctgggact ttctgttaca ttgaccctga gtaccaacaa 60
 actggaatgc taggtgtgaa atctgatgtc tactcttttg gtatcttgct tctcgaactg 120
 ctacacgcga aaaggccgac ggggtttggct tataccgttg agcaagcaat ggagcaaggg 180
 aaattcaagg atatgttaga cccagcagtg cctaaactggc cgggtggaaga agctatgtct 240
 ttggcaaaaga ttgctcttaa atgtgcacag ctgagaagga aagaccgacc agacctcgga 300
 aaagaggttt taccagagct caataaattg agagctcgtg cagatacgaa tatggaatgg 360
 atgatgttca acttaagtag aggtcgtcta acaccaaatac atagccaagt gtccttgcca 420
 ccagttgtaa gtaatgaaaa agctctttgc aattctagtc ttttaagttaa aatctttgaa 480
 atgcttttggg tgcaggatga actaagtgtg tgctcggata agtcttatac acattcaagc 540
 actgtatccg acacagagaa gaactcaggt gcattagaga accatatttt ttccatcttc 600
 ttttaacattt ttacaatgtg ttgatccat caaatcttac agtttactct gtttcttttc 660
 cagaccaaaa cgaagaggat tagcatattt tgtgtgttga aggaaatgga gtgagaccat 720
 tgtaaagct tatgtaattg tgaatattgt tgtatgtatg tatgtatata attcgtaaag 780
 gaagaaaata actgaaggaa aaagttgagt aggtttgtta taatatctct gcaaagacgc 840
 aaactctttt ttgatattg aagacaaaat atatagacca cataattcgc accctaattc 900
 taagaaactt ctaaattgag aaattgggtc atcgatttca gtggaaagtg gtacttagct 960
 aaattgagaa aggtgcctca atttcagtag aacctgacgc aaaatttcgc gatcatgcat 1020
 gactcaaat ggtttattca cttaaataaa aaagttgttt ccctatctag ttgaagttct 1080
 caattcaaac gcaacttctt actttttctt tttatttata ctggaatgaa tttttcgtca 1140
 atgctagacc tcaatatttg gtgattaagt ccaaaaaatt atagcaatat tcattagtta 1200
 aatcataata atatttgta tttctgctaa atataattag tttaaattgg taaatatatc 1260
 agtcatcata ctttatatat gtgcacaaga aaaagaggaa aaaaaactaa cttttaataa 1320
 attgaacgct atcctctata tctcgtcctg gtccaaatgt aaacttcaat atccttttga 1380
 ttttattgct gattgcttta aaaaatttca caaacacttt tatcattctt ttattccacc 1440
 aaaatctaca gacataatac ttgttaattt tatgtaaaaa tcttcaaaat ttgggaaaag 1500
 aaaaatcatt taaaatcaat ttgcattaac tggatttatt tccaaagggtg tggattgtg 1560
 tttatatatg tggagtgtt ggctagtaat ataataagga aaagagtga acatatgtag 1620
 tataacgtag tctagtttt tttctctgta ttaataagac actaattaag tagtatgcat 1680
 taattgaatt atcagaagct ggtcacaaaa gtctacaaaa aaaaacaaaa aaattgggtca 1740
 gaagaaaatg aaaaataatga gaataaaaaa gggaaaaaaa ataagaagct agcaaacaaa 1800
 gcaattaaca tttcaaggca gttaattcat catgcaagggt gcttatgtgt gacaacgtca 1860
 tgcgttactt ttgctgtcta cactcatctc tctaacgcaa tccactaatt ctggtaatgg 1920
 attctgctat ttagaccagc cagtttcttc gtctctcaat catcatccaa aaacattctt 1980
 ctcaacaaga tcagattcaa gatagaagtt tttcaaacaa tgtctagtcc tcttggtcac 2040
 tttcagattc ttgtttttct tcatgctttg cttatcttct cagctgagtc ccgcaaaacc 2100
 caattgctga acgataatga tgttgaatct agcgacaaga gtgcaaaagg cacacgatgg 2160
 gctgttttag ttgctggatc aaatgaatat tataactaca ggcacaggt tgtaaatta 2220
 tgtttgaacg tttaacataa caaaaaaaaa aaaggtccaa gcgagatttg tatgaactaa 2280
 atcgaccgac gttttatttc acaggctgac atatgccacg cgtatcagat actccgaaaa 2340
 ggcggtttaa aagatgaaaa catcattgtg tttatgtatg atgatatcgc gttttcctcg 2400
 gagaatccta ggcctggagt tatcattaat aaaccagatg gagaagatgt ttataaagga 2460
 gttcctaagg ttcttatttc tacttctttt gtgcgttatt tctacgttga attcaattac 2520
 atatatatat tcaagttttg ttgttattgg ttgggttagga ctacactaaa gaagctgtta 2580
 atgttcaaaa cttctacaat gtgttacttg gaaatgaaag tggcgtcaca ggaggaaatg 2640
 gcaaagttgt gaaaagtggt cctaattgata atatcttcac ctattatgct gaccatggag 2700

ctcctggctt	aataggtttt	cttaatttta	tgaaattatt	acgtaccatc	aatccatata	2760
tataataaaa	gattttctct	tgatactacg	aaaccgcgat	tttctcagcg	atgcccactg	2820
gtgatgaagt	tatggcaaaa	gattttcaatg	aagtcttgga	gaagatgcat	aagagaaaaa	2880
aatacaacaa	gatggtatat	aactcaacca	ttcgttacct	agctttatac	atatgtgttc	2940
tgtttttgaa	tctctatggt	gtgttttttt	ggatgttttag	gtgatctatg	ttgaagcatg	3000
tgaatcagga	agtatgtttg	aagggttttt	aaagaaaaat	ctcaacatat	acgcagtgac	3060
tgctgctaata	tctaaagaga	gcagctgggg	agtttactgt	cctgagtcac	atcctcctcc	3120
tccttctgag	attggaactt	gtctcggcga	tacatttagc	atctcttggc	ttgaggacag	3180
gtactgcaaaa	caaaaaagat	tcaatcctta	tggactattc	gaatgatttg	atttgttctt	3240
gaagaatatt	tgttcatttg	ttctatgttt	tgtgtgtgtt	tggggacagt	gaccttcacg	3300
acatgagcaa	agagactttg	gagcaacaat	accacgttgt	aaagagaaga	gtaggatctg	3360
atgtaccaga	gactttctcat	gtatgccgtt	tcggaacaga	gaagatgctt	aaagattatc	3420
tttctcttta	cattggaaga	aatcctgaaa	acgataactt	cactttcacg	gaatcctttt	3480
cctcaccaat	ctctaattct	ggcttggtca	atccgcgcga	tattcctctg	ctatacctcc	3540
agagaaaagg	gagctttttt	cgggtttttt	gatcatttta	aacgaaagag	ttttcagcat	3600
gttttaaatgt	ttattcatct	cttagattca	aaaagctcca	atgggatcac	ttgaaagcaa	3660
agaagctcag	aagaaattgc	ttgacgaaaa	gaatcatagg	aaacaaatcg	atcagagcat	3720
tacagacatt	ctgcggcttt	cagttaaaca	aaccaatgtc	ttaaatctct	taacttccac	3780
aagaacaaca	ggacagcctc	ttgtagacga	ttgggattgc	ttcaagactc	tagtaacaaa	3840
ccacatctca	aaccttgta	cttgtgttct	acgcaacaac	cattgcatta	ttactaaacc	3900
agtgtatata	gaatgaaaat	cgcaggttaa	tagcttcaag	aatcaactgc	gtgcaacggt	3960
gcattacgga	ttgaagtata	caggagcgct	tgccaatatc	tgcaatatgg	gagtggatgt	4020
gaagcaaaact	gtttcagcca	ttgaacaagc	ttgttcgatg	taatgatttg	caaaacaatg	4080
tgatattoga	ctttaaaaat	atcaaagtta	atttcaataa	aactcgatgt	agagatgggt	4140
ggttcatgat	actactttta	catgaaaagc	tttttaatcg	atgataacgc	gaaagtcttg	4200
gtctaaattt	gtgaattgga	ttcatggaac	aataacctcg	taccaactgt	acggtacgga	4260
cggctgtact	ttggttgagt	taccaataaa	tagtcttctt	ccaataactt	gttgaccacg	4320